



ENTERED OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/090,215

DATE: 03/20/2002  
TIME: 11:38:36

Input Set : A:\Sequence listing.txt  
Output Set: N:\CRF3\03202002\J090215.raw

3 <110> APPLICANT: Dubin, Adrienne E  
4 Huvar, Arne  
5 Erlander, Mark G  
6 Glass, Charles A  
8 <120> TITLE OF INVENTION: DNA encoding Isoforms of the human Vanilloid Receptor  
9 VR3  
11 <130> FILE REFERENCE: Human VR3 receptors  
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/090,215  
C--> 14 <141> CURRENT FILING DATE: 2002-03-04  
16 <160> NUMBER OF SEQ ID NOS: 17  
18 <170> SOFTWARE: PatentIn Ver. 2.1  
20 <210> SEQ ID NO: 1  
21 <211> LENGTH: 26  
22 <212> TYPE: DNA  
23 <213> ORGANISM: Artificial Sequence  
25 <220> FEATURE:  
26 <223> OTHER INFORMATION: Description of Artificial Sequence:  
27 Oligonucleotide  
29 <400> SEQUENCE: 1  
30 accggcctat cctctttgac atcgta 26  
33 <210> SEQ ID NO: 2  
34 <211> LENGTH: 25  
35 <212> TYPE: DNA  
36 <213> ORGANISM: Artificial Sequence  
38 <220> FEATURE:  
39 <223> OTHER INFORMATION: Description of Artificial Sequence:  
40 Oligonucleotide  
42 <400> SEQUENCE: 2  
43 tgtccgcctt cttgtggggg ttctc 25  
46 <210> SEQ ID NO: 3  
47 <211> LENGTH: 48  
48 <212> TYPE: DNA  
49 <213> ORGANISM: Artificial Sequence  
51 <220> FEATURE:  
52 <223> OTHER INFORMATION: Description of Artificial Sequence:  
53 Oligonucleotide  
55 <400> SEQUENCE: 3  
56 aacgttggtta cgcaccat ggcgattcc agcgaaggcc cccgcgcg 48  
59 <210> SEQ ID NO: 4  
60 <211> LENGTH: 39  
61 <212> TYPE: DNA  
62 <213> ORGANISM: Artificial Sequence  
64 <220> FEATURE:

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/090,215

DATE: 03/20/2002

TIME: 11:38:36

Input Set : A:\Sequence listing.txt

Output Set : N:\CRF3\03202002\J090215.raw

65 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence:

66 Oligonucleotide

68 &lt;400&gt; SEQUENCE: 4

69 taaagcggcc gcttcaggag ggacatcggt gaggcctcac

39

72 &lt;210&gt; SEQ ID NO: 5

73 &lt;211&gt; LENGTH: 2616

74 &lt;212&gt; TYPE: DNA

75 &lt;213&gt; ORGANISM: Homo sapiens

77 &lt;400&gt; SEQUENCE: 5

```

78 atggcggatt ccagcgaagg cccccgcgcg gggcccgggg aggtggctga gctccccggg 60
79 gatgagagtg gcaccccgagg tggggaggct tttcctctct cctccctggc caatctgttt 120
80 gagggggagg atggctccct ttgcacctca ccggtgatg ccagtcgccc tgctggccca 180
81 ggcgatgggc gaccaaactt gcgcatgaag ttccaggcg ccttcgcaa ggggtgccc 240
82 aaccccatcg atctgctgga gtccacccta tatgagtcct cgggtgtgcc tgggcccagg 300
83 aaagcaccca tggactcaact gtttgactac ggcacctatc gtcaccactc cagtgaaca 360
84 aagaggtgga ggaagaagat catagagaag cagccgcaga gcccacaaag ccctgcccct 420
85 cagccgcccc ccactctcaa agtcttcaac cggcctatcc tctttgacat cgtgtcccgg 480
86 ggtccactg ctgacctgga cgggctgctc ccattcttgc tgaccacaa gaaacgccta 540
87 actgatgagg agtttcgaga gccatctacg ggggaagacct gcctgcccaa ggccttgctg 600
88 aacctgagca atggccgcaa cgacaccatc cctgtgctgc tggacatcgc ggagcgcacc 660
89 ggcaacatgc gggagtccat taactcgccc ttccgtgaca tctactatcg aggtcagaca 720
90 gccctgcaca tcgccattga gcgtcgctgc aaacactacg tggaaacttct cgtggcccag 780
91 ggagctgatg tccacgcccc gggcctgtgg cgcttcttcc agcccaagga tgaggggggc 840
92 tactttact ttggggagct gcccctgtcg ctggctgcct gcaccaacca gcccacatt 900
93 gtcaactacc tgacggagaa cccccacaa gaggcggaca tgcggcgcca ggactcgcca 960
94 ggcaacacag tgctgcatgc gctggtggcc attgctgaca acaccctga gaacaccaag 1020
95 ttgtttacca agatgtacga cctgctgctg ctcaagtgtg cccgcctctt ccccgacagc 1080
96 aacctggagg ccgtgtcaa caacgacggc ctctcgcccc tcatgatggc tgccaagacg 1140
97 ggcaagattg ggtctttca gcacatcatc cggcgggagg tgacggatga ggacacacg 1200
98 cacctgtccc gcaagtcaa ggactgggc tatgggccag tgtattctc gctttatgac 1260
99 ctctctccc tggacacgtg tgggaagag gcctcgtgc tggagatcct ggtgtacaac 1320
100 agcaagattg agaaccgcca cgagatgctg gctgtggagc ccatcaatga actgtgcgg 1380
101 gacaagtggc gcaagttcgg ggcgtctcc ttctacatca acgtggtctc ctacctgtgt 1440
102 gccatggtca tcttactct caccgcctac taccagccgc tggagggcac accgccgtac 1500
103 cttaccgca ccacggtgga ctacctgcgg ctggctggcg aggtcattac gctcttact 1560
104 ggggtcctgt tcttcacac caacatcaaa gacttgttca tgaagaaatg ccctggagt 1620
105 aattctctct tcattgatgg ctcttccag ctgctctact tcatctactc tgtcctgggt 1680
106 atcgtctcag cagccctcta cctggcaggg atcgaggcct acctggccgt gatggtcttt 1740
107 gccctggtcc tgggtggat gaatgccctt tacttcaacc gtgggctgaa gctgacgggg 1800
108 acctatagca tcatgatcca gaagattctc ttcaaggacc tttccgatt cctgctcgct 1860
109 tacttctct tcatgatcgg ctacgcttca gccctggtct ccctcctgaa cccgtgtgct 1920
110 aacatgaagg tgtgcaatga ggaccagacc aactgcacag tgcccactta cccctcgtgc 1980
111 cgtgacagcg agaccttcag cacttctcct ctggacctgt ttaagctgac catcggcatt 2040
112 ggcgacctgg agatgctgag cagcaccaag taccocgtgg tcttcatcat cctgctgggt 2100
113 acctacatca tcttcacct tgtgctgctc ctcaacatgc tcattgccct catgggcgag 2160
114 acagtgggccc aggtctccaa ggagagcaag cacatctgga agctgcagtg ggccaccacc 2220
115 atcctggaca ttgagcgtc cttccccgta ttctgagga aggccttccg ctctggggag 2280
116 atggtcaccg tgggcaagag ctcgacggc actcctgacc gcaggtggtg cttcagggtg 2340
117 gatgaggtga actggtctca ctggaaccag aacttgggca tcatcaacga ggaccggggc 2400

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/090,215

DATE: 03/20/2002

TIME: 11:38:36

Input Set : A:\Sequence listing.txt

Output Set: N:\CRF3\03202002\J090215.raw

```

118 aagaatgaga cctaccagta ttatggcttc tcgcataccg tgggcccgcct ccgcagggat 2460
119 cgctggctcct cgggtggtacc ccgcgtggtg gaactgaaca agaactcgaa cccggacgag 2520
120 gtggtggtgc ctctggacag catggggaac ccccgctgcg atggccacca gcagggttac 2580
121 ccccgcaagt ggaggactga tgacgccccg ctctag 2616
124 <210> SEQ ID NO: 6
125 <211> LENGTH: 3500
126 <212> TYPE: DNA
127 <213> ORGANISM: Homo sapiens
129 <400> SEQUENCE: 6
130 caattgggat ttaaaccag ggactatcca gcccacaaage ccttcccacc acaccagggtg 60
131 gcctgtcctg gggccagctc tgcacacagg gcctggtgcc cccggggtgc ttgggaagtg 120
132 gcagggcaga ggtgggccct gtggtctgtt tggtcagct tctaaaacaa gagcctctgc 180
133 tgggggcaga ggggccgtga acccctgaaa tgttaggcag ataccctgtg ggagctttgt 240
134 tctgggatgc taagaaccgc ttgaggattt aagctttgcc acttttgctc cggagcaagg 300
135 gcagaggctg agcagtgcag acgggcctgg ggcaggcatg gcgattcca gcgaaggccc 360
136 ccgcgcgggg cccggggagg tggctgagct ccccggggat gagagtggca cccagggtgg 420
137 ggaggctttt cctctctcct ccctggccaa tctgtttgag ggggaggatg gctccctttc 480
138 gccctcaccg gctgatgcca gtgcacctgc tggcccaggc gatgggcgac caaatctgcg 540
139 catgaagtgc cagggcgcct tccgcaaggg ggtgcccac cccatcgatc tgctggagtc 600
140 caccctatat gagtctcggg tgggtgcctg gcccaagaaa gcacccatgg actcactgtt 660
141 tgactacggc acctatcgtc accactccag tgacaacaag aggtggagga agaagatcat 720
142 agagaagcag ccgcagagcc ccaaagcccc tgcccctcag ccgcccccca tctcaaagt 780
143 cttcaaccgg cctatcctct ttgacatcgt gtcccggggc tccactgctg acctggacgg 840
144 gctgctccca ttcttgctga cccacaagaa acgcctaact gatgaggagt ttcgagagcc 900
145 atctacgggg aagacctgcc tgcccagggc cttgctgaac ctgagcaatg gccgcaacga 960
146 caccatccct gtgctgctgg acatcgcgga gcgcaccggc aacatgcggg agttcattaa 1020
147 ctgcaccttc cgtgacatct actatcgagg tcagacagcc ctgcacatcg ccattgagcg 1080
148 tcgctgcaaa cactacgtgg aacttctcgt ggcccaggga gctgatgtcc acgcccaggc 1140
149 ccgtgggcgc ttcttccagc ccaaggatga ggggggctac ttctactttg gggagctgcc 1200
150 cctgtcgtg gctgcctgca ccaaccagcc ccacattgtc aactacctga cggagaacct 1260
151 ccacaagaag gcggacatgc ggcgccagga ctgcgcaggc aacacagtgc tgcattgcgt 1320
152 ggtggccatt gctgacaaca ccogtgagaa caccaagttt gttaccaaga tgtaogacct 1380
153 gctgctgctc aagtgtgccc gcctcttccc cgacagcaac ctggaggccg tgctcaacaa 1440
154 cgacggcctc tcgcccctca tgatggtgca caagacgggc aagattggga tctttcagca 1500
155 catcatccgg cgggaggtga cggatgagga cacacggcac ctgtcccgca agttcaagga 1560
156 ctgggcctat gggccagtgt attcctcgct ttatgacctc tctccctgg acacgtgtgg 1620
157 ggaagaggcc tccgtgctgg agatcctggt gtacaacagc aagattgaga accgccacga 1680
158 gatgctggct gtggagccca tcaatgaact gctgcgggac aagtggcgca agttcggggc 1740
159 cgtctccttc tacatcaacg tgggtctcta cctgtgtgcc atggtcatct tcaactctac 1800
160 cgctacttac cagccgctgg agggcacacc gcggtacct taccgcacca cgggtggacta 1860
161 cctgcggctg gctggcgagg tcattacgct cttaactggg gtccgtttct tcatcaccia 1920
162 catcaaagac ttgttcatga agaaatgccc tggagtgaat tctctcttca ttgatggctc 1980
163 ctccagctg ctctacttca tctactctgt cctggtgata gtctcagcag cctctacct 2040
164 ggagggtatc gaggcctacc tggccgtgat ggtctttgcc ctggtcctgg gctggatgaa 2100
165 tgccctttac ttcaccctgt ggcctgaagc gacggggacc tatagcatca tgatccagaa 2160
166 gattctcttc aaggaccttt tccgattcct gctcgtctac ttgctcttca tgatcggcta 2220
167 cgcttcagcc ctggtctccc tccgaaaccc gtgtgccaac atgaagggtg gcaatgagga 2280
168 ccagaccaac tgcacagtgc ccacttacct ctcgtgcgtg gacagcgaga ccttcagcac 2340
169 ctctcctctg gacctgttta agctgacct cggcatgggc gacctggaga tgctgagcag 2400

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/090,215

DATE: 03/20/2002

TIME: 11:38:36

Input Set : A:\Sequence listing.txt

Output Set: N:\CRF3\03202002\J090215.raw

```

170 caccaagtac cccgtggtct tcatcatcct gctggtgacc tacatcatcc tcacctttgt 2460
171 gctgctcctc aacatgctca ttgccctcat gggcgagaca gtgggccagg tctccaagga 2520
172 gagcaagcac atctggaagc tgcagtgggc caccaccatc ctggacattg agcgctcctt 2580
173 ccccgctattc ctgaggaagg ccttccgctc tggggagatg gtcaccgtgg gcaagagctc 2640
174 ggacggcaact cctgaccgca ggtggtgctt caggggtgat gaggtgaact ggtctcactg 2700
175 gaaccagaac ttgggcatca tcaacgagga cccgggcaag aatgagacct accagtatta 2760
176 tggcttctcg cataccgtgg gccgcctccg cagggatcgc tggtcctcgg tggtagccccg 2820
177 cgtggtggaa ctgaacaaga actcgaaccc ggacgaggtg gtggtgcctc tggacagcat 2880
178 ggggaacccc cgctgcgatg gccaccagca gggttacccc cgcaagtggg ggactgatga 2940
179 cgccccgctc tagggactgc agcccagccc cagcttctct gcccaactcat ttctagtcca 3000
180 gccgcatttc agcagtgcct tctggggtgt cccccacac cctgctttgg ccccagaggc 3060
181 gagggaccag tggaggtgcc agggaggccc caggaccctg tggccccctg gctctgcctc 3120
182 cccaccctgg ggtgggggct cccggccacc tgtcttgctc ctatggagtc acataagcca 3180
183 acgccagagc cctccacct caggccccag cccctgcctc tccattattt atttgctctg 3240
184 ctctcaggaa gcgacgtgac cctgcacca gctggaacct ggcagaggcc ttaggacccc 3300
185 gttccaagtg cactgcccgg ccaagcccca gcctcagcct gcgcctgagc tgcattgcgc 3360
186 accatttttg gcagcgtggc agctttgcaa ggggctgggg ccctcggcgt ggggcatatg 3420
187 cttctgtgtg ttctgtagt tctgggattt gccggtgctc aataaatgtt tattcattga 3480
188 cgggtggaaaa aaaaaaaaaa 3500

```

191 &lt;210&gt; SEQ ID NO: 7

192 &lt;211&gt; LENGTH: 871

193 &lt;212&gt; TYPE: PRT

194 &lt;213&gt; ORGANISM: Homo sapiens

196 &lt;400&gt; SEQUENCE: 7

```

197 Met Ala Asp Ser Ser Glu Gly Pro Arg Ala Gly Pro Gly Glu Val Ala
198   1           5           10           15
200 Glu Leu Pro Gly Asp Glu Ser Gly Thr Pro Gly Gly Glu Ala Phe Pro
201           20           25           30
203 Leu Ser Ser Leu Ala Asn Leu Phe Glu Gly Glu Asp Gly Ser Leu Ser
204           35           40           45
206 Pro Ser Pro Ala Asp Ala Ser Arg Pro Ala Gly Pro Gly Asp Gly Arg
207           50           55           60
209 Pro Asn Leu Arg Met Lys Phe Gln Gly Ala Phe Arg Lys Gly Val Pro
210           65           70           75           80
212 Asn Pro Ile Asp Leu Leu Glu Ser Thr Leu Tyr Glu Ser Ser Val Val
213           85           90           95
215 Pro Gly Pro Lys Lys Ala Pro Met Asp Ser Leu Phe Asp Tyr Gly Thr
216           100          105          110
218 Tyr Arg His His Ser Ser Asp Asn Lys Arg Trp Arg Lys Lys Ile Ile
219           115          120          125
221 Glu Lys Gln Pro Gln Ser Pro Lys Ala Pro Ala Pro Gln Pro Pro Pro
222           130          135          140
224 Ile Leu Lys Val Phe Asn Arg Pro Ile Leu Phe Asp Ile Val Ser Arg
225           145          150          155          160
227 Gly Ser Thr Ala Asp Leu Asp Gly Leu Leu Pro Phe Leu Leu Thr His
228           165          170          175
230 Lys Lys Arg Leu Thr Asp Glu Glu Phe Arg Glu Pro Ser Thr Gly Lys
231           180          185          190
233 Thr Cys Leu Pro Lys Ala Leu Leu Asn Leu Ser Asn Gly Arg Asn Asp

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/090,215

DATE: 03/20/2002

TIME: 11:38:36

Input Set : A:\Sequence listing.txt

Output Set: N:\CRF3\03202002\J090215.raw

```

234          195          200          205
236 Thr Ile Pro Val Leu Leu Asp Ile Ala Glu Arg Thr Gly Asn Met Arg
237          210          215          220
239 Glu Phe Ile Asn Ser Pro Phe Arg Asp Ile Tyr Tyr Arg Gly Gln Thr
240 225          230          235          240
242 Ala Leu His Ile Ala Ile Glu Arg Arg Cys Lys His Tyr Val Glu Leu
243          245          250          255
245 Leu Val Ala Gln Gly Ala Asp Val His Ala Gln Ala Arg Gly Arg Phe
246          260          265          270
248 Phe Gln Pro Lys Asp Glu Gly Gly Tyr Phe Tyr Phe Gly Glu Leu Pro
249          275          280          285
251 Leu Ser Leu Ala Ala Cys Thr Asn Gln Pro His Ile Val Asn Tyr Leu
252          290          295          300
254 Thr Glu Asn Pro His Lys Lys Ala Asp Met Arg Arg Gln Asp Ser Arg
255 305          310          315          320
257 Gly Asn Thr Val Leu His Ala Leu Val Ala Ile Ala Asp Asn Thr Arg
258          325          330          335
260 Glu Asn Thr Lys Phe Val Thr Lys Met Tyr Asp Leu Leu Leu Leu Lys
261          340          345          350
263 Cys Ala Arg Leu Phe Pro Asp Ser Asn Leu Glu Ala Val Leu Asn Asn
264          355          360          365
266 Asp Gly Leu Ser Pro Leu Met Met Ala Ala Lys Thr Gly Lys Ile Gly
267          370          375          380
269 Ile Phe Gln His Ile Ile Arg Arg Glu Val Thr Asp Glu Asp Thr Arg
270 385          390          395          400
272 His Leu Ser Arg Lys Phe Lys Asp Trp Ala Tyr Gly Pro Val Tyr Ser
273          405          410          415
275 Ser Leu Tyr Asp Leu Ser Ser Leu Asp Thr Cys Gly Glu Glu Ala Ser
276          420          425          430
278 Val Leu Glu Ile Leu Val Tyr Asn Ser Lys Ile Glu Asn Arg His Glu
279          435          440          445
281 Met Leu Ala Val Glu Pro Ile Asn Glu Leu Leu Arg Asp Lys Trp Arg
282          450          455          460
284 Lys Phe Gly Ala Val Ser Phe Tyr Ile Asn Val Val Ser Tyr Leu Cys
285 465          470          475          480
287 Ala Met Val Ile Phe Thr Leu Thr Ala Tyr Tyr Gln Pro Leu Glu Gly
288          485          490          495
290 Thr Pro Pro Tyr Pro Tyr Arg Thr Thr Val Asp Tyr Leu Arg Leu Ala
291          500          505          510
293 Gly Glu Val Ile Thr Leu Phe Thr Gly Val Leu Phe Phe Ile Thr Asn
294          515          520          525
296 Ile Lys Asp Leu Phe Met Lys Lys Cys Pro Gly Val Asn Ser Leu Phe
297          530          535          540
299 Ile Asp Gly Ser Phe Gln Leu Leu Tyr Phe Ile Tyr Ser Val Leu Val
300 545          550          555          560
302 Ile Val Ser Ala Ala Leu Tyr Leu Ala Gly Ile Glu Ala Tyr Leu Ala
303          565          570          575
305 Val Met Val Phe Ala Leu Val Leu Gly Trp Met Asn Ala Leu Tyr Phe
306          580          585          590

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/090,215

DATE: 03/20/2002

TIME: 11:38:37

Input Set : A:\Sequence listing.txt

Output Set: N:\CRF3\03202002\J090215.raw

L:13 M:270 C: Current Application Number differs, Replaced Application Number

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date